



RESIDENTIAL DEVELOPMENT GUIDE

Re-Roofing

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BEFORE PURSUING THE BUILDING PERMIT

Before beginning any work, answering the questions below will help with the permitting process.

Is a contractor doing the work?

There are many ways to ensure that you are working with a good contractor. The City of Houston does not license building contractors, but there are several voluntary trade organizations where you can find lists of them. You can also check the Better Business Bureau (www.bbb.org) for business reviews, alerts and tips. Be sure to always check references and ensure that your contractor is properly insured.

Are you aware of any Homeowners Association (HOA) restrictions?

HOAs sometimes place restrictions on the types of construction that can occur, so be sure to check with your HOA before beginning any construction projects.

Is your property in the 100 year floodplain or floodway?

Prior to starting your project, visit www.gims.houstontx.gov to determine if your property is located in the 100-year floodplain, floodway or conveyance zone. If you have flood insurance you can also contact your insurance provider for this information as well.

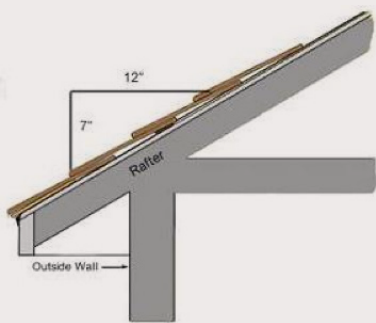
What is the total cost of your project?

The estimated project cost will be needed in order to complete the building permit application. (See page 4 for more information)



HOUSTON
PERMITTING
center

DEFINITIONS

BASE FLOOD ELEVATION (BFE)	The expected height of flooding during the base flood or “100-year event” (a rainstorm that has a 1% chance of occurring in a given year).
BUILDING ELEVATION	Two-dimensional view of each side of the building.
CLASS B ROOF ASSEMBLIES	Roof assemblies that are effective against moderate fire-test exposure and are listed and identified as Class B by an approved testing agency (Section 1505.3 of the 2006 IBC).
CLASS C ROOF ASSEMBLIES	Roof assemblies that are effective against light fire test exposure and are listed and identified as Class C by an approved testing agency (Section 1505.4 of the 2006 IBC).
CONVEYANCE ZONE	The portion of the Special Flood Hazard Area that is utilized to convey water during the occurrence of the base flood. Areas in a floodplain where natural ground is 18 inches below base flood elevation or are within 100 feet of the floodway are defined as conveyance zones.
FLOODPLAIN	Land area around a stream, river or bayou that would be affected by flooding during a “100-year event” (a rainstorm that has a 1% chance of occurring in a given year), because the water is no longer contained within the banks of the stream, river or bayou during or after that event. In the City of Houston, this area has been mapped throughout the City and can be found on the GIMS (Geographic Information & Management System) website. www.gims.houstontx.gov . The floodplain is also known as “A” zones on flood insurance maps produced by FEMA. “A” zones include Zone A, Zone AE and Zone AO.
FLOODWAY	The area for storm runoff along a bayou, river, or other watercourse. In the City of Houston, this area has been mapped throughout the City and can be found on the GIMS website. www.gims.houstontx.gov
HOMEOWNER'S ASSOCIATION	An organization created by a group of property owners, or property developers which helps to oversee any shared property belonging to the homeowner group, and which usually has a legal means of enforcing agreed upon rules the homeowners must follow.
PROJECT COST	This includes the total cost of construction to the end user, excluding the land purchase costs and the overhead attributed to the land purchase. It also includes the value of donated goods and services.
PROPERTY LINE	A line dividing one lot from another, or from a street or any public place.
ROOF PITCH	The amount of rise your roof has compared to the length. In other words, for every 12 inches of length your roof will rise a set number of inches. This diagram illustrates a roof that has a 7 inch rise for every 12 inches of length (or 7/12 pitch)
	
SHEATHING	A layer of material applied to the outer frame of a building to strengthen the structure and serve as a base for an exterior weatherproof cladding.
SUBSTANTIAL IMPROVEMENT	City of Houston Ordinance Chapter 19-2 states that a “substantial improvement” means any reconstruction, rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds 50% of the current market value of the structure (before the start of the construction of the improvement).
UNDERLAYMENT	One or more layers of felt, sheathing paper, nonbituminous saturated felt or other approved material over which a steep-slop roof covering is applied.

HELPFUL INFORMATION AND LINKS

Flood maps: www.gims.houstontx.gov

Harris County Appraisal District:
www.hcad.org

Montgomery Central Appraisal District:
www.mcad-tx.org

Fort Bend Central Appraisal District:
www.fbcad.org

Harris County Flood Control District (HCFCD)
9900 Northwest Freeway
Houston, TX 77092
713-684-4000

Harris County Flood Control District
Watershed Coordinator
713-956-3074

Harris County Flood Control District
Property Management
713-684-4000

Center Point Energy Land & Right-of-Way Department (TRT-11)
PO Box 1700
Houston, TX 77251-1700
Attention: Julie Bray 713-207-1557
Linsey Williams 713-207-6211

Southwestern Bell Telephone Company (SBC) Right-of-Way
7602 Spring Cypress, Room #226
Spring, TX 77379
Jerry Ray 281-379-7524 or Amanda Burus 281-379-7518

WHAT SPECIAL CONDITIONS EXIST?

The following items represent the special conditions that must be considered as you prepare your plans:

Building Code Enforcement**Overlay Conditions**

- ☐ More than 2 overlays of shingles are not permitted. If the current project results in a third overlay of shingles, ALL shingles must be removed prior to attaching new shingles to the roof.
- ☐ If the overlay material is wood shingles or wood shakes, a roof detail is required. This detail must show the gypsum board, mineral fiber, glass fiber, or other approved materials securely fastened in place.
- ☐ An overlay of asphalt shingles over existing wood shingles or wood shakes requires that the asphalt shingles be fastened to solidly sheathed decking.

Roof Pitch Conditions

- ☐ If the roof is 2/12 pitch or less, asphalt shingles are not permissible.
- ☐ Roofs with a pitch between 2/12 and 4/12 require double underlayment

**Townhome Conditions**

- ☐ A class C roof is required for a townhome roof with a parapet wall.
- ☐ A minimum class B roof is required for a townhome with no parapet wall.

Floodplain Management Office (FMO)

If the project is in the 100-year floodplain, floodway or conveyance zone, Floodplain Plan Review is only required if the project cost is greater than \$10,000.

- ☐ If the project is in the 100-year floodplain or floodway and represents a 'substantial improvement' to the property, then the entire building must be brought into compliance with the elevation requirement as explained below.
 - For properties in 100-year floodplain, the minimum flood protection elevation for the lowest floor and utilities of a building is 12" above Base Flood Elevation.
 - For properties in the floodway, the minimum flood protection elevation for the lowest horizontal member and utilities is 18" above Base Flood Elevation (BFE). Completely open foundations are required in the floodway. (An example of an open foundation is a pier and beam foundation.)

KEY CONTACTS**Houston Permitting Center**

Hours of Operation:

8:00 am – 5:00 pm

1002 Washington Ave.

Houston, TX 77002

Phone: 832-394-9000

Email: houston.permittingcenter@houstontx.gov**Building Code Enforcement Permits**

Hours of Operation:

8:00am – 5:00pm

Contact Information:

Phone: 832-394-9494

Email: rmcad@houstontx.gov**Floodplain Management Office**

Hours of Operation:

8:00am – 4:30pm

Contact Information:

Phone: 832-394-8854

Email: fmo@houstontx.gov**Inspections**

General Number 713-222-9922

Flood 832-394-8854

Structural 832-394-8840

Electrical 832-394-8860

Mechanical 832-394-8850

Plumbing 832-394-8870

DOCUMENTS REQUIRED FOR BUILDING PERMIT APPROVAL☐ **Building Permit Application Form**

This form should be completed prior to arriving at the Houston Permitting Center (HPC).

☐ **Residential Re-Roof 'Only' Worksheet**

NOTE: This form must be completed if the scope of work for the re-roof is replacing shingles and decking.

☐ **Two Complete Sets of Plans Drawn to Scale (if applicable)**

NOTE: Plans are typically NOT required for Re-Roof projects.

However if the below situation exists you will be expected to provide the plan details outlined below.

WOOD SHINGLE OR WOOD SHAKES OVERLAY

- A roof detail is required
 - This detail must show the gypsum board, mineral fiber, glass fiber, or other approved materials securely fastened in place.

☐ **Project Cost (see Definitions on page 2):**

For a building permit, the required cost estimate is a market valuation that includes the profit and overhead.

NOTE: If the project cost appears to be unreasonably low, a signed contract between the owner and contractor may be required.

☐ **Floodplain Plan Review Requirements**

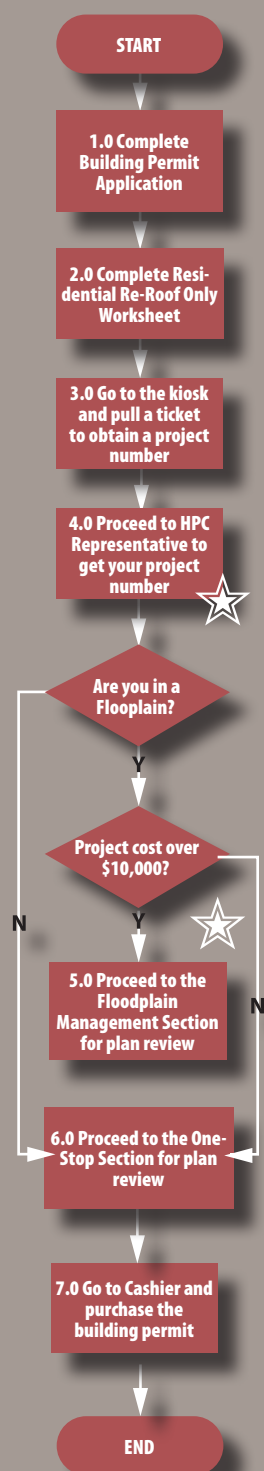
You must provide the following if your property resides in the 100-year floodplain, floodway or conveyance zone

- A cost estimate must be provided in one of the following ways:
 - A signed, sealed, and dated cost estimate provided by a professional engineer or architect, each licensed by the state of Texas
 - A cost estimate prepared, signed and dated by an insurance adjuster, licensed by the state of Texas, may be provided to document the cost of repairing a damaged structure.
 - A notarized contract of work signed and dated by the property owner and a contractor
 - An owner-certified cost estimate with an owner- notarized signature may be submitted when the property owner proposes to construct the improvements or repairs. In such cases, the cost estimate must itemize the cost of materials and a reasonable estimate of the market value of labor for work performed by the owner. The Floodplain Management Office has developed a form ([Project Cost Estimation Worksheet](#)) that can be used for owner self-certification of cost.
- Documentation of the market value of the existing structure must be provided in one of the following ways:
 - The most recent property appraisal from Harris County Appraisal District (www.hcad.org) OR Montgomery Central Appraisal District (www.mcad-tx.org) OR Fort Bend Central Appraisal District (www.fbcad.org)

- An appraisal performed by a certified real estate appraiser licensed by the Texas Appraiser Licensing and Certification Board (TALCB) that documents the market value of the structure prior to the proposed project or represents a depreciated replacement cost

If proposed project is a 'substantial improvement' (refer to Definitions page 2):

- Either provide an elevation certificate based on finished construction documenting that the existing building's finished floor meets the elevation requirements (refer to special conditions) or provide an elevation certificate based on construction drawings and prepared by a licensed surveyor or engineer that shows that the building will be modified to meet the elevation requirements.
- Calculations for flood openings must be provided with plans
- *For projects within the floodway*, pier and beam construction is required
- *For projects within the floodway*, a "no adverse impact" letter and supporting documentation prepared by a professional engineer is required



CUSTOMER TIP:

A kiosk ticket is required to access the various services at the HPC. Have the CSR 'transfer' your current ticket to the next service in the Plan Review process instead of pulling a new ticket from the kiosk.

STEPS TO FOLLOW AT THE HPC FOR THE BUILDING PERMIT

- 1.0 Complete the Building Permit Application prior to arriving at the HPC.
- 2.0 Complete the Re-Roof Only Worksheet if the Re-roof project involves replacing the shingles and decking.
- 3.0 Once at the HPC you must obtain a ticket for a project number from the kiosk station located on the first floor and wait for your number to be called.
- 4.0 HPC Customer Service Representatives (CSR) will call you on a first-come, first-serve basis. Your first step will be to obtain a project number.
- 5.0 The Floodplain Management Office is responsible for permitting all construction activity within the City of Houston's Special Flood Hazard Area (100-year floodplain, floodway or conveyance zone). You only need to visit the Floodplain Management Office if your project is located in the 100-year floodplain, floodway or conveyance zone **AND** if the estimated project cost is greater than \$10,000. If this is not the case, please proceed to Step 6.
- 6.0 The One-Stop Plan Review section ensures plans submitted are in compliance with the current construction codes. This section will issue the building permit (which authorizes you to begin construction) after your plans have been approved by all required departments/sections. A sales order will be provided to take to the cashier to purchase the building permit.
- 7.0 All monetary transactions are handled by the cashier on the 1st floor. The cashier will be able to provide your building permit once all fees have been paid.

SECTION	KIOSK PATH
Building Permits	Permits -> Building Construction -> Project Number / Single Trade
Floodplain Management Office	Plan Review -> Flood Management Plan Review -> Flood Management
One-Stop Plan Review	Plan Review -> Building Plan Review -> One Stop Plan Review

Customer Tip:

All required inspections can be scheduled online at www.pdinet.pd.houstontx.gov/cohilms/webs/Inspection_Lookup.asp or by contacting the Building Inspection Line at 713-222-9922.

The owner can only schedule building permit inspections. All other inspections must be scheduled by a licensed contractor.

WHAT INSPECTIONS SHOULD BE EXPECTED?

All required inspections are listed on the building permit job card. The following are some typical inspections that are performed for most re-roof projects. These inspections may change depending on each project's scope of work.

Structural Inspections

- ☐ After roofing is complete

Flood Inspections (Only when project is in the 100-year floodplain, floodway or conveyance zone AND project cost is over \$10,000)

- ☐ Pre-Construction
- ☐ Final Sitework (upon completion of all work outside of the building)

LINKS TO APPLICATIONS, FORMS AND SAMPLE DRAWINGS

The below documents can be accessed by clicking the hyperlinks or by visiting www.houstonpermittingcenter.org/code-enforcement/publications.html

Applications and Forms

1. [Building Permit Application](#)
2. [Residential Re-Roof 'Only' Worksheet](#)
3. [Project Cost Estimation Worksheet](#) (Flood Requirement Only)

Sample Drawings and Other Useful Information

1. [Conveyance Zone FAQ](#)
2. [GIMS - How to Check Floodplain Statusx](#)